ACTA PHYSICA

ACADEMIAE SCIENTIARUM HUNGARICAE

ADIUVANTIBUS
R. GÁSPÁR, L. JÁNOSSY, K. NAGY, L. PÁL, A. SZALAY, I. TARJÁN

REDIGIT
I. KOVÁCS

TOMUS XL

U. I. C. C.
MAY 13 1977
LIBRARY

AKADÉMIAI KIADÓ, BUDAPEST
1976

INDEX

Tomus 40

R. C. Sharma, Kirti Prakash and *S. N. Dube:* Effect of Suspended Particles on the Onset of Bénard Convection in Hydromagnetics 3

R. C. Sharma: Effect of Rotation on Thermal Instability of a Viscoelastic Fluid 11

N. Barakat, I. Shawky and *S. M. Hekmat:* Correlation Between Theoretical and Experimental Atom—Ion, Ion—Ion Analytical Curves in Spectral Analysis 19

M. M. Rajabe Bacha: Relation between Resistivity and Thermopower for Dilute Alloys Containing Transition Metals 27

I. Szabó and *M. M. Rajabe Bacha:* Thermopower of Al(Mn) Alloys 37

J. F. C. Machado and *M. M. Shukla:* Non Central Forces versus Lattice Vibrations in Noble Metals 43

J. Bergou: Charged-Particle Scattering in the Presence of an External Electromagnetic Field 55

RECENSIONES 63

P. Vajda and *J. A. White:* 30th Anniversary of Zoltán Bay's Pioneer Lunar Radar Investigations and Modern Radar Astronomy 65

R. Collier: Exakte Reduktion der allgemeinrelativistischen Dirac-Gleichung auf eine Pauli-Typ-Gleichung. I. 71

R. Ram and *M. Gaur:* The Growth and Decay of Sonic Waves in Dissociating Gases 85

S. N. Dube: Linear Radial Flow of a Viscous Liquid between Two Parallel Coaxial Stationary Infinite Disks 95

J. Major, E. Nagy and *G. Tichy:* Dilatometric Measurement on Al—Mg—Si Alloys ... 105

I. Tamássy-Lentei: Non-exponential Wave Functions in Elliptical Coordinates for Molecules I 111

I. Tamássy-Lentei: Non-exponential Wave Functions in Elliptical Coordinates for Molecules II 117

S. N. Dube and *C. L. Sharma:* An Exact Solution of the Transient Forced Convection Energy Equation for Timewise Linear Variation of Inlet Temperature in a Channel 123

RECENSIONES 129

I. Kovács: Singlet-Triplet Perturbations in the Spectra of Diatomic Molecules 131

L. M. Srivastava: On the Problem of Unsteady Viscous MHD Flow past an Infinite Porous Flat Plate with Constant Suction 139

M. El Khishen and *M. Toubia:* Electron-Positron Annihilation under Magnetic Field ... 147

M. Abdel-Salam and *M. Abdellah:* Computation of Sparking Voltages for Uniform Field Gaps in Compressed Air 155

R. Collier: Exakte Reduktion der allgemeinrelativistischen Dirac-Gleichung auf eine Pauli-Typ Gleichung. II 161

R. Jancel: Kinetical Analysis of Non-Linear Wave Phenomena in Weakly Dissipative Plasmas 177

RECENSIO 211

Franklin R. Ruehl, Jr.: A Coupled Central-Tensor Effective Nucleon-Nucleon Interaction Potential 213

O. J. Orient: Mobilites of H^+ and D^+ Ions in Helium and Neon Gases, Theoretical Aspects of the Measurements 223
P. Singh: Fluctuating Free Convection Boundary Layers 237
K. Kozmutza: Calculation of Harmonic Force Constants by Semiempirical Methods 245
V. Bretz: An Improved Method for Calculation of Angular Momentum Coupling Coefficients 255
G. Náray-Szabó: Towards a Molecular Orbital Method for the Conformational Analysis of Very Large Biomolecules 261
K. Martinás and *I. Kirschner:* Determination of the Basic Phenomenological Parameters of Superconductivity 275
R. Gáspár and *I. Tamássy-Lentei:* Molecular Pseudopotential Calculations III 283

RECENSIONES 293